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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/919,619	08/01/2001	Christian Criegee	P 281519 / 000319 OC	2502

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PILLSBURY WINTHROP SHAW PITTMAN, LLP
P.O. BOX 10500
MCLEAN, VA 22102

EXAMINER

GRAY, JILL M

ART UNIT	PAPER NUMBER
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1774

DATE MAILED: 04/21/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/919,619

Applicant(s)

CRIGEE ET AL.

Examiner

Jill M. Gray

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 27 February 2006.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-3, 6-9, 11 and 13-19 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-3, 6-9, 11, and 13-19 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Response to Amendment

The rejection of claims 1 and 9, under 35 U.S.C. 112, second paragraph as being indefinite is withdrawn in view of applicants' arguments.

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1-3, 6-9, 11, and 13-19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Scheibli et al 6,036,731 (Scheibli) in view of Weil et al, 3,755,323 (Weil), for reasons of record.

Scheibli teaches cellulose fibers having amino-s-triazine compounds bound thereto, said compounds being of the type contemplated by applicants in claims 1, 2, and 9. See columns 4, 5, 7, and 8. The cellulose is cotton or viscose fiber and is in the form of yarns or fabric as required by claims 3 and 11. See column 13, lines 3-14. In addition, Scheibli teaches a method comprising treating the cellulose fibers under alkaline conditions and treating with a cyanuric chloride derivative. See column 15, lines 14-30. The compound is used in amounts within applicants' ranges as set forth in claims 4, 6, and 18. See column 14, lines 62-65 and column 15, lines 1-4. As to claims 13 and 19, it is the examiner's position that since Scheibli teaches that his compound is added on the cellulose fibers in an amount within applicants' range, properties such as

the nitrogen content of the finished cellulose fibers would be the same as well, and therefore within the range set forth by applicants, in the absence of clear factual evidence to the contrary. Regarding claims 16 and 17, Scheibli teaches cellulosic fibers treated with a cyanuric chloride compound of the type set forth by applicants.

Accordingly, it is the examiner's position that the same or similar compounds necessarily have the same or similar properties. Thus the examiner has reason to believe that the cellulose fibers of Scheibli have an LOI value within applicants' claimed range. Scheibli is silent as to his cellulose fibers being flameproof. It is the position of the examiner that the compounds taught by Scheibli in formulas 1a, 2, 2', and 6 are the same as or substantially similar to the compounds of applicants' claims 1-2 and 9. The same compounds necessarily have the same properties. Therefore, the examiner has reason to believe that the composition of Scheibli has properties that are the same as or similar to that contemplated by applicants and thereby imparts a flameproofing finish to the cellulose fibers.

In the alternative, Weil teaches flame retardant textile finishes comprising triazinylaminoalkyl phosphonates having a structural formula of the same type claimed by applicants in claims 1 and 8-9. See column abstract, column 1, lines 4-6 and column 2, lines 26-57, column 3, line 55 through column 4, line 15. The flameproof finish can be utilized for both natural and synthetic textile materials, wherein the natural materials can be cellulose. See column 9, lines 30-38 and column 12, lines 16-25. In addition, Weil teaches that the concentration of the triazinylaminoalkyl phosphonate is dependent upon the degree of flameproofing that is desired and said concentration being sufficient

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to deposit upon the textile from about 5 to 75 percent by weight of triazinylaminoalkyl phosphonate, per claims 1 and 9, which results in a phosphorus content of about 0.2 to 7.5 percent by weight, as required by claims 7 and 14-15. See column 10, lines 4-20. Moreover, Weil teaches that his finished textiles have an LOI of at least 22, as required by claim 16 and greater than 25 as required by claim 17. See Examples VII and VIII. Regarding the nitrogen content of claims 6, 13, 15, 18, and 19, it is the examiner's position that since Weil teaches that his compound is added on the cellulose fibers in an amount within applicants' range, properties such as the nitrogen content of the finished textiles would be the same as well, and therefore within the range set forth by applicants, in the absence of clear factual evidence to the contrary.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to use the composition of Weil in the process taught by Scheibli with the reasonable expectation of producing flameproof durable press, wrinkle-free textile articles.

Response to Arguments

3. Applicant's arguments filed February 27, 2006 have been fully considered but they are not persuasive.

Applicants argue that Weil teaches the use of triazinylaminoalkyl phosphonates that are applied to textile fibers in combination with urea and that while this may improve flame retardance, it also reduces the mechanical properties of the fiber, whereas applicants' claimed flameproofing method covalently bonds the triazinyl group to the fiber surface and that bonding the triazinyl group in this manner provides flameproofing

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properties, but does not significantly reduce the mechanical properties of the fabric.

Applicants further argue that if one of skill in the art were to substitute the triazinylaminoalkylphosphonate in Weil with the amino-s-triazine compounds of Scheibli, the binding would likely take place through the phosphonate resulting in a fabric that contains the undesirable mechanical properties discussed previously.

This is not found to be persuasive because there is no factual evidence on this record to substantiate applicants' allegations of poor mechanical properties.

No claims are allowed.

Conclusion

4. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jill M. Gray whose telephone number is 571-272-1524. The examiner can normally be reached on M-Th and alternate Fridays 10:30-7:00.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Rena Dye can be reached on 571-272-3186. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Jill M. Gray
Primary Examiner
Art Unit 1774

jmg